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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/576,965

04/25/2006

Hidekazu Hoshino

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EXAMINER

KILPATRICK, BRYAN T

ART UNIT

PAPER NUMBER

1797

NOTIFICATION DATE

DELIVERY MODE

06/21/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/576,965	Applicant(s) HOSHINO ET AL.	
	Examiner BRYAN T. KILPATRICK	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 April 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 2,3 and 10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-9 and 11-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicants' amendments and arguments/remarks filed on 26 April 2010 have been entered and fully considered.
2. Instant claims 1, 8-9, and 11 have been amended; instant claims 2-3 and 10 have been cancelled; and instant claims 12-15 have been newly added by Applicants' amendments.
3. In light of Applicants' amendment, the objection of instant claim 10 has been withdrawn since it has been cancelled by Applicants' amendment.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 26 April 2010 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 8-9, and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "... in this order..." in line 11. It appears that a reference is made to a type or particular of "order," however there is insufficient antecedent basis for this limitation in the claim.

Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted step(s) are/is: a step for expressly viewing the discrimination medium of instant claim 8 via an optical filter; for example, "viewing the discrimination medium via the optical filter" as compared to the last line of instant claim 8 – "wherein the discrimination medium is viewed via the optical filter."

Claims 1, 8-9, and 11 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationship(s) are/is: the stacked structural relationship of the cholesteric liquid crystal layer to the multilayer film of the discrimination medium as described by Fig. 1 of the instant application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 4-9, and 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over European Patent 1,028,359 A1 (SHIOZAWA et al.).

In regards to instant claim 1, SHIOZAWA et al. discloses an authenticity film having circular polarized light selectivity in the Abstract. Paragraphs [0030]-[0041] of SHIOZAWA et al. disclose the use of cholesteric liquid layers to make films having multiple layers that are shown to be stack upon each other in Fig. 1. SHIOZAWA et al. discloses in Fig. 4(A) a reflective film 11 between protective layer 12 and light absorbing layer 13 that reflects either right or left-handed circularly polarized light - film 11 reflects light at the interface with layer 12 and at surface 11a, which is at the interface of layer 13. SHIOZAWA et al. discloses selective refractivity to reflect light in a specific waveband more strongly than light of a wavelength in other wavebands, as well as reflecting different polarized lights in paragraphs [0043]-[0045]. SHIOZAWA et al. discloses a method of producing a hologram (which the prior art defines as a pattern, image, or characters in the first line of paragraph [0062]) on an authenticity identifying film comprised of multiple layers: a reflective film (which has a cholesteric liquid crystal layer or phase), a protective film, a light absorbing film, and a base film in paragraphs [0046]-[0057].

Since it is well known in the art that an interface is defined as a common boundary of two objects, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ the authenticity film of SHIOZAWA et al. as a discrimination medium since the authenticity film of SHIOZAWA et al. employs multi-layered films that “may be any one of mediums having optical selective reflectivity and

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circularly polarized light selectivity” (paragraph [0033] of SHIOZAWA et al.) for authenticity identifying (Abstract of SHIOZAWA et al.).

Instant claim 4 requires a figure to be provided to at least a portion of one of the layer and film. Instant claim 5 requires hologram working or embossing. Instant claim 6 requires interlayer peeling structure or a peeling breaking structure. Instant claim 7 requires an article to be discriminated having the discrimination medium. Paragraph [0003] of SHIOZAWA et al. discloses the use of characters and patterns similar to the figures and characters stated by the current instant specification in paragraph [0003]. Paragraphs [0012]-[0013] of SHIOZAWA et al. disclose an embossed hologram and an authenticity identifying film attached to an article via an adhesive layer. Paragraph [0099] of SHIOZAWA et al. discloses the use of a form of peeling breaking for preventing the reuse of a discrimination medium.

Instant claims 8-9 and 11 discloses either a method or apparatus for discriminating a discrimination medium that uses a discrimination medium comprised of films having multiple layers being analyzed by a device having an optical filter, a light irradiation device, and a light detector. The Abstract, paragraphs [0019]-[0022], and paragraphs [0085]-[0091] of SHIOZAWA et al. disclose the use of these type of components in a system for authenticity identification which uses multi-layered films that “may be any one of mediums having optical selective reflectivity and circularly polarized light selectivity” (paragraph [0033] of SHIOZAWA et al.). As previously stated above,

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SHIOZAWA et al. discloses in Fig. 4(A) a reflective film 11 between protective layer 12 and light absorbing layer 13 that reflects either right or left-handed circularly polarized light - film 11 reflects light at the interface with layer 12 and at surface 11a, which is at the interface of layer 13. SHIOZAWA et al. discloses selective refractivity to reflect light in a specific waveband more strongly than light of a wavelength in other wavebands, as well as reflecting different polarized lights in paragraphs [0043]-[0045]. SHIOZAWA et al. discloses a method of producing a hologram (which the prior art defines as a pattern, image, or characters in the first line of paragraph [0062]) on an authenticity identifying film comprised of multiple layers: a reflective film (which has a cholesteric liquid crystal layer or phase), a protective film, a light absorbing film, and a base film in paragraphs [0046]-[0057].

In regards to instant claims 12-15, SHIOZAWA et al. discloses a method of producing a hologram (which the prior art defines as a pattern, image, or characters in the first line of paragraph [0062]) on an authenticity identifying film comprised of multiple layers: a reflective film (which has a cholesteric liquid crystal layer or phase), a protective film, a light absorbing film, and a base film in paragraphs [0046]-[0057].

SHIOZAWA et al. discloses hologram forming layers and two different hologram-forming interfaces in paragraphs [0075]-[0076]. SHIOZAWA et al. discloses a detection system employing a light source unit, a detector, and a filtering component (paragraphs [0085]-[0088]). SHIOZAWA et al. discloses the production and detection of different polarized reflected light and holographic images, in addition to measuring the intensity of light as

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part of detection (paragraphs [0089]-[0091]). Furthermore, SHIOZAWA et al. discloses detection wherein no holographic images and only the color of light is observed (paragraph [0054]).

Response to Arguments

Applicant's arguments with respect to independent instant claims 1, 8-9, and 11 - as well as their respective dependent instant claims 4-7 and 12-15 - have been considered but are moot in view of the new ground(s) of rejection necessitated by Applicants' amendment.

Furthermore, Applicants' arguments/remarks filed 26 April 2010 have been fully considered but they are not persuasive. Regarding Applicants' arguments/remarks and amendments for the discrimination medium of amended instant claims 1, 8-9, and 11 in p. 9-13 of the filed remarks, the independent instant claims (as well as their respective dependent claims) do not clearly recite the stacked structural relationship (or design) of the cholesteric liquid crystal layer to the multilayer film of the discrimination medium as described by Fig. 1 of the instant application – see 35 U.S.C. 112, 2nd paragraph rejection above. Furthermore, the functions of the claimed discrimination medium are disclosed by SHIOZAWA et al. – see 35 U.S.C. 103(a) above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRYAN T. KILPATRICK whose telephone number is (571)270-5553. The examiner can normally be reached on Monday - Friday, 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (571)272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/B. T. K./
Examiner, Art Unit 1797

/Samuel P Siefke/
Primary Examiner, Art Unit 1797